

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Dipen N. Sinha : Docket No.: S-100,658
Serial No.: : Examiner:
Filed : August 26, 2003 : Art Unit:
For : NONINVASIVE
CHARACTERIZATION OF A
FLOWING MULTIPHASE FLUID :
USING ULTRASONIC :
INTERFEROMETRY :
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Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR 1.56, 1.97, AND 1.98

Sir:

The documents listed below, copies attached, are submitted in compliance with the duty of disclosure defined in 37 CFR 1.56.

1. Dipen N. Sinha, "Noninvasive Identification of Fluids by Swept-Frequency Acoustic Interferometry," U.S. Pat. 5,767,407, issued June 16, 1998.
2. F. Eggers et al., "Ultrasonic Relaxation Spectroscopy in Liquids," Naturwissenschaften **63**, 280 (1976).
3. Dipen N. Sinha et al., "Noninvasive Determination of Sound Speed and Attenuation in Liquids," Experimental Methods in the Physical Sciences Volume **39**, 307, Academic Press (September 2001).
4. Dipen N. Sinha et al., "Method for Determining the Octane Rating of Gasoline Samples by Observing Corresponding Acoustic Resonances Therein," U.S. Pat. 5,606,130, issued February 25, 1997.

5. Dipen N. Sinha, "Apparatus and Method for Comparing Corresponding Acoustic Resonances in Liquids," U.S. Pat. 5,886,262, issued March 23, 1999.
6. Zhijing Wang et al., "Ultrasonic Velocities in Pure Hydrocarbons and Mixtures," J. Acoustical Society of America **89**(6), 2725 (1991).
7. Z. Wang et al., "Wave Velocities in Hydrocarbon-Saturated Rocks: Experimental Results," Geophysics 55(6), pp. 723-733.

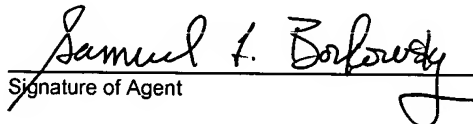
This Information Disclosure Statement is not to be construed as a representation that a search has been made or that additional matter material to the examination of this application does not exist. Applicant does not believe that any of these citations constitutes prior art under 35 U.S.C. 102.

It is requested that the above citations be made of record in the prosecution of this application.

Respectfully submitted,

Date: August 26, 2003

Reg. No. 42,346
Phone (505) 665-3111



Signature of Agent

Samuel L. Borkowsky
Los Alamos National Laboratory
LC/IP, MS A187
Los Alamos, New Mexico 87545

Form PTO-1449 U.S. Department of Commerce (Modified) Patent and Trademark Office		Attorney Docket No. S-100,658		Serial No.	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Applicant(s) Dipen N. Sinha			
37 CFR 1.98(b)		Filing Date August 26, 2003		Group	

U.S. PATENTS DOCUMENTS													
EXAMINER INITIAL	PATENT NUMBER							ISSUE DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE	
	5		7	6	7		4	0	7	06/16/1998	Dipen N. Sinha		01/23/1996
	5		6	0	6		1	3	0	02/25/1997	Dipen N. Sinha et al.		03/25/1994
	5		8	8	6		2	6	2	03/23/1999	Dipen N. Sinha		03/25/1994

FOREIGN PATENT DOCUMENTS													
EXAMINER INITIAL	PATENT NUMBER							ISSUE DATE	COUNTRY	CLASS	SUB CLASS	Translation YES NO	

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)	
	F. Eggers et al., "Ultrasonic Relaxation Spectroscopy in Liquids," Naturwissenschaften 63, 280 (1976)
	Dipen N. Sinha et al., "Noninvasive Determination of Sound Speed and Attenuation in Liquids," Experimental Methods in the Physical Sciences, Volume 39, 307, Academic Press (September 2001)
	Zhijing Wang et al., "Ultrasonic Velocities in Pure Hydrocarbons and Mixtures," J. Acoustical Society of America 89(6), 2725 (1991)
	Z. Wang et al., "Wave Velocities in Hydrocarbon-Saturated Rocks: Experimental Results," Geophysics 55(6), 723-

EXAMINER:	DATE CONSIDERED:
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*EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.